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OM nucleic - nucleic search, using sw model

Run on: May 3, 2003, 21:10:52 ; Search time 212.959 seconds  
(without alignments)  
16512.552 Million cell updates/sec

Title: US-10-027-000-1

Perfect score: 2976  
Sequence: 1 ttatagctgttgaat.....aaaaaaaaaaaaaaaa 2976

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 746064 seqs, 590810554 residues

Total number of hits satisfying chosen parameters: 1492128

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications, NA:\*

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	175.2	5.9	2430	9	US-09-860-846-23
2	175.2	5.9	2430	9	US-09-988-384B-23
3	175.2	5.9	2430	10	US-09-861-289-23
4	175.2	5.9	12441	9	US-09-988-384B-3
5	175.2	5.9	13613	9	US-09-860-846-3
6	175.2	5.9	13613	10	US-09-861-289-3
7	138.6	4.7	50937	9	US-09-808-880-1
8	135.8	4.6	2166	9	US-10-121-032-5
9	135.8	4.6	2166	9	US-10-093-037-5
10	84.4	2.8	390	10	US-09-790-399-7
11	78.2	2.6	1294	10	US-09-748-033-2
12	76.2	2.6	1107	10	US-09-748-033-6
13	76.2	2.6	2712	10	US-09-748-033-4
14	73.6	2.5	1914	10	US-09-815-242-9
15	73.2	2.5	2541	10	US-09-476-242-9
16	73.2	2.5	1185	10	US-09-887-576-784
17	71.6	2.4	2010	12	US-10-032-717-9
18	71.6	2.4	2541	10	US-09-476-242-10
19	71.6	2.4	2541	10	US-09-476-242-12

20	70.8	2.4	1929	9	US-09-899-642-1	Sequence 1, Appl1
21	70.8	2.4	13842	9	US-09-860-846-30	Sequence 30, Appl1
22	70.8	2.4	13842	9	US-09-988-384B-30	Sequence 30, Appl1
23	70.8	2.4	13842	10	US-09-861-289-30	Sequence 30, Appl1
24	70.8	2.4	36778	9	US-09-860-846-5	Sequence 5, Appl1
25	70.8	2.4	36778	10	US-09-861-289-5	Sequence 5, Appl1
26	70.8	2.4	37948	9	US-09-988-384B-5	Sequence 5, Appl1
27	70.8	2.4	2541	10	US-09-476-242-11	Sequence 11, Appl1
28	69.8	2.3	88421	9	US-09-976-059-1	Sequence 1, Appl1
29	68.8	2.3	1896	9	US-10-124-800-15	Sequence 15, Appl1
30	68	2.3	804	9	US-09-773-748-2	Sequence 2, Appl1
31	67.6	2.3	15872	9	US-09-860-846-1	Sequence 1, Appl1
32	67.6	2.3	15872	9	US-09-988-384B-1	Sequence 1, Appl1
33	67.6	2.3	15872	10	US-09-861-289-1	Sequence 12, Appl1
34	67.4	2.3	310	10	US-09-864-864-162	Sequence 31, Appl1
35	67	2.3	1512	9	US-10-124-800-31	Sequence 5, Appl1
36	67	2.3	4509	9	US-10-124-800-5	Sequence 325, Ap
37	67	2.3	4512	9	US-10-124-800-27	Sequence 26, Appl1
38	66.8	2.2	434	10	US-09-960-352-3525	Sequence 20, Appl1
39	66.6	2.2	905	10	US-09-748-033-7	Sequence 2, Appl1
40	66.6	2.2	1965	10	US-09-826-660-26	Sequence 2, Appl1
41	66.6	2.2	2322	10	US-09-476-242-20	Sequence 4765, Ap
42	66.4	2.2	3468	9	US-09-988-462-2	Sequence 5818, Ap
43	66.2	2.2	495	10	US-09-878-574-4765	Sequence 5390, Ap
44	66	2.2	425	9	US-09-918-995-5818	
45	65.8	2.2	362	10	US-09-960-352-5390	

## ALIGNMENTS

RESULT 1  
US-09-860-846-23 Application US/09860846  
Sequence 23, Appl1  
Patent No. US2002016472A1  
GENERAL INFORMATION:  
APPLICANT: Sherman, D. H.  
APPLICANT: Liu, H.  
APPLICANT: Xue, Y.  
APPLICANT: Zhao, L.  
TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
FILE REFERENCE: 600.438US1  
CURRENT APPLICATION NUMBER: US/09/860, 846  
CURRENT FILING DATE: 2001-05-18  
PRIOR FILING DATE: 1998-06-26  
NUMBER OF SEQ ID NOS: 43  
SOFTWARE: FastSeq for Windows Version 3.0  
SEQ ID NO 23  
LENGTH: 2430  
TYPE: DNA  
ORGANISM: Streptomyces venezuelae  
US-09-860-846-23

Query Match	5.9%;	Score 175.2;	DB 9;	Length 2430;
Best Local Similarity	47.6%;	Pred. No. 2.4e-33;		
Matches 1016;	Conservative	0;	Mismatches 968;	Indels 150; Gaps 11;
QY	544	CGCTGGTTCACATTAACCAACTCTGCTGACAGGAGGAGTATGATGAGCAAG	603	
DB	353	CCCTGGCCACACCTTGACACACATGCGCCACACGACGACGACGACGACGACG	412	
QY	604	AGGCGATCGCTAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	663	
DB	413	ACGGTCCGCGCTACACGACGACGACGACGACGACGACGACGACGACGACGACG	472	
QY	664	CTTCGGTGGACGCTGCTGATGATGATGATGATGATGATGATGATGATGATGATG	723	
DB	473	CGACGAGGCGGCGGACGACGACGACGACGACGACGACGACGACGACGACGACG	532	
QY	724	CTGGCGCTCTATCCGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	783	
DB	533	CGGTGCGCCAGATCAAGGAGGATCCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	592	



Db	1222	CTGGGCAACGGCCACAGTGTCTCCGGACTCGAGGGCGGCCGCCACTCTGACACCATCAAGGCC	1281
Oy	1504	AGCAATGCTTCACGCCCGGACGGGCGCTCCGGGCATGCGCTGGAGGGTCTTCAACTAGCCCC	1563
Db	1282	CGCGGGGTGCGGGGTGGCGAGGGTGAAGTACAGACGGGTGAGGAGACTTCGGGACACAG	1341
Oy	1564	CTGGTACCCCTTACCGCCACATATGACAGGCTTTCTTCCACAAAGCAGCAATGACAG	1623
Db	1342	ATCCGGGGGGGGAACCTCAGC-----CCGGCGTTCAACC	1375
Oy	1624	TGGTGACTACTTACCAACCCAAAGGGCGACAGACAGTGGTACCGCAGATGAGGGCACT	1683
Db	1376	AGGGCCACAGCTTCAGGCCGGGCAAGGGGGGGCGCTGTACAGCGCACGCTGACCGGTGC	1435
Oy	1684	ACACGCGCGACGAGAGACTGACACTACAGAGCTGGCTGTGGTCTGCGGGCAACGGCAAGG	1743
Db	1436	CGCGCGACGGCGAGTACCGCATCGGGGTCCGGCCACCGGTGGTTACGCCACGGGTGCAG-	1494
Oy	1744	CGTACGTACACCAACGAGCTGTGTGTGACAAAGCCACCAAGCAGGTCCCGGCGATGCGCT	1803
Db	1495	-----CTCGGCAAGCCACA	1507
Oy	1804	TCTTGCGCTCCGCAACCCGCGAGGAGACGGCGCATCATTTCTGTCAAAGGCAACAGT	1863
Db	1508	CCATCGAGGCGGGTCAAGGTCTACGGCAAGTGAAGCCCGCTCTCTCAAGCTGACCAAGG	1567
Oy	1864	ACAAGTTCGAATGAGATTGCGCTCCGCAACCACTACACCCCTCAAGCGGACACCATCG	1923
Db	1568	GCAGCGACAAGCT-----CACGATCTCGGGCTTCGGGATGA	1603
Oy	1924	TCCCGGGCCACGGCTCCCTCGCGTGGGGCTGCAAGGTCAATTGACGACACAGGCCGAAA	1983
Db	1604	GTCGCAACCCGCGTCTCCCTGGAGACTGGGGCTGGGTGAAGCGCGGGGGGCGCAACGGCACGA	1663
Oy	1984	TCGAAAGTCCGTGCGCCCTGCCCAAGAGACACCAAGGTCAATTCATCTTGCGGGGGCTTA	2043
Db	1664	TCGGGAAGGCGGTGAAGTCCGGCGCGGAAGGCCGTACCGGGGCGTCTTGCG-----	1715
Oy	2044	ACGCGCACTGGGAGACGAGGGGGCCGACCGCGCAGACATGAAGCTCCCGCGGGTCTGG	2103
Db	1716	-CTACGACGACGCGACGAGGGGCGTCCACCGTCCGAAACCTGTGCGTCCGGGTACACAGG	1774
Oy	2104	ACCAAGCATTTGGCCGAGTGGCCGCGCGGAAACCCAAACACCGTGTGTATGACAAAGG	2163
Db	1775	ACAAGCTGATTCGGGTGTGCGGAGCCCAACCCGAACAGATGTGGTCTTAACACCG	1834
Oy	2164	GCACCCCGGAGGAATGCGCTGGGTGCACGCGACGCGCGCGTATCCAGAGCTGTGATTC	2223
Db	1835	GTTGCTCGGTCTGATGTGCGGTGGGTGTTCACAAAGACCCCGCGGTCTGTGAAATGTTGATAC	1894
Oy	2224	GCGGCAAGGAAACGGGCAACTCCATTGGCCAGTGTCTTTGGGACTACAAACCCCTCGG	2283
Db	1895	CGGGCGACAGCGGGGCGCCGAGGCGCAACCGCGCGGTCTTACGGTGAAGTCAACCCGAGCG	1954
Oy	2284	GCAGCTGTCCCTCAGCTTCCCG-----AAGCGCTGCAAGAACCCCGCGCTTTC	2334
Db	1955	GCAAAGCTACGAGAGCTTCCCGCGCGCGGAAACACACACGCGGTGCGCGGCAACCGGA	2014
Oy	2335	TCAACTTCGCGACCGAGCGCGGGCGACAGCTGTACGGCGAGGAGAGTCTACGTCGGGTACA	2394
Db	2015	CAAAGCTACCCGGGCGCTGCAGAACCAAGCAGACGTACCGGAGGGGATCCACGTCGGGTACC	2074
Oy	2395	GGTACTACGATTTGGCCGCAAGGACGTCATATTTCCCTTGGGCAAGGGCGTGTCTTCA	2454
Db	2075	GGTGGTTCACAAAGGAGAACTCAAGCGCGCTGTCTCCGTTGGGCGACGGCGCTGTGTAC	2134
Oy	2455	CCACTTTGGCTTTTCCAACTCTCTCGGTGTCAACAAGAC--GGCAAGTGAAGCTGT	2511
Db	2135	CCGTGTTACGCAAGAGCGCCCGACCGTGTGTGTACGTCCACGGGTGTGTGAAGGTCA	2194
Oy	2512	CCCTTCCTGGAAGAACACCGGCTCCGTGCCGGCGCACAGTGGCCGAGCTTACGTCA	2571

Db 2195 CGGTCAAGGTCCGCAACAGCGGGAAGCGCCGCGCAGAGAGTGTCCAGGCGTACTCG 2254  
 QY 2572 ACCTCTCCAGAGGCGCAAGATTAAACGCCCCGTCAAGAGACTCAAGGCGTTGGCAAGG 2631  
 Db 2255 GTGCCAGCCCGCAACGTGACGGCTCCGCGAGGGAAGAAAGTGTGGCTACACGAGG 2314  
 QY 2632 TCGAAGTCAAGCGCCGCGCAAGAGGCGGTGAC 2665  
 Db 2315 TCTCGCTCGCGCGGCGAGGCGAAGACGGTGAC 2348

## RESULT 3

US-09-861-289-23  
 : Sequence 23, Application US/09861289  
 : Patent No. US20020110897A1  
 : GENERAL INFORMATION:  
 : APPLICANT: Sherman, D.H.  
 : APPLICANT: Liu, H.  
 : APPLICANT: Xue, Y.  
 : APPLICANT: Zhao, L.  
 : TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
 : FILE REFERENCE: 600.438US1  
 : CURRENT APPLICATION NUMBER: US/09/861,289  
 : PRIOR FILING DATE: 2001-05-18  
 : PRIOR APPLICATION NUMBER: 09/105,537  
 : NUMBER OF SEQ ID NOS: 43  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 23  
 : LENGTH: 2430  
 : TYPE: DNA  
 : ORGANISM: Streptomyces venezuelae  
 : US-09-861-289-23

Query Match 5.9%; Score 175.2; DB 10; Length 2430;  
 Best Local Similarity 47.6%; Pred. No. 2,4e-33;  
 Matches 1016; Conservative 0; Mismatches 968; Indels 150; Gaps 11;

QY 544 CGCTCGGTCCACATTCACCAACTCTGTCGAGAGGAGAGTAAAGTATGGGCAAG 603  
 Db 353 CCTGCGCAGACCTTCGACGACACCATGCGCGACAGTACGGGACGTCATGGCGCG 412  
 QY 604 AGGCGCATTCGCTAAGATGGCGCATGTGATCTCTGGCCGACATATCAATGCAAGCGTCCC 663  
 Db 413 AGCGTGGCGGCTCAACGAGACATGTCTGGGCCGATGATGAACAATCCGGGAGC 472  
 QY 664 CTCTCGGTGAGCTGCTCGAGTGTGATGAGATCCGTTCTGGCGGCGTTGGAG 723  
 Db 473 CGCAGCGGCGGCGAAGTACGAGACTTCAGCAGAGGACCCCTGCTCTCGGCGACCG 532  
 QY 724 CTGCGGCTTCATCCGCGCATTCAGAGACTGAGTGCAGGTACGATCAAGCACTTT 783  
 Db 533 CGGTGCGCCAGTCAAGGGGATCCAGGTGCGGGCTGTGATGACCAAGGCCAAGACTTCC 592  
 QY 784 TGTGAATGATGAGGAGGAGCGGCGCATGATGTGTCAGAGCATGTTCAGAGCGGCGTC 843  
 Db 593 CGGCGCAACACGAGAGCAACCGCTTCTCCGTGAAGCGCAATGTGACGACAGACGC 652  
 QY 844 TCCGTGAATGTAGCACTCCGCTTCCAGATGTGTCGAGAGCTCCACGCGGCGTCC 903  
 Db 653 TCCGAGATGTAGTTCCTCCGCGCTTCAG---GCGTCTCCAAAGCGCGGCGGCTCTCT 709  
 QY 904 TCAATGAGCGGTACATGTCATGAGCGGTGTCGACGAGAACCCCTAAATATCTTG 963  
 Db 710 TCAATGTGCTACAGGCGCTCAACGGAAGCGCTCTCGGCAAGAGAGACTCTCTA 769  
 QY 964 ATGGATCTTCGAAGAAGATGGGCTGGAGTGGCCATATCATAGACGACTGTGACGCA 1023  
 Db 770 ACAAGTGTCTCGACACCATGTGGGCTTCCAGGCTGGGGTGTGCTCGACTGCTCGCA 829  
 QY 1024 CATACAGTACCAAGAACCGTGTGTGACAGGCTCGACCTCGAGATGCGCGGACCTCCAC 1083  
 Db 830 C---CCGCGGACGCGAGCATCAACCAAGGCTCTCGACCAAGAGATG----- 873

QY 1084 GCTTCGAGAGAAACTCAAGTTCACAGTCTTCAACGAGAAAGCCCTTATTCACGTCA 1143  
 Db 874 -----GGGTGTAGTCTCCCGCGACGTCCGAGAGGCGAGCCCTCCGCCCGCA 925  
 QY 1144 TTGACCAAGAGGGCTAGGCAAGTCTTCAAGTTCGTCGAAGAGTGTGCTCCGAGTGA 1203  
 Db 926 AGTTTGTGGCGA---GGCGTGAAGAGGCGCTTCGAAGGCGAGGCTCCCGAGCGG 982  
 QY 1204 CGGAGAACGCGCCCGAGACGACTGTCAACAACCCCGAAAGCGGAGCTCTCTCCGGA 1263  
 Db 983 CCGTACGCGGCTGCGCGAGAGGATGCTCGGCCAAGATGAGAAAGTTCGCTGTCTCTCG 1042  
 QY 1264 AGTTGGCAAGAGGCGATGTCTGTGTAAGAACGAAACAAAGTTCGCTCTTGAGCA 1323  
 Db 1043 CCACTCGGCGCGCGCGCGCGAGAGCGAGAGCGGGGTCCCGAGGCGTGTCCCGAAG 1102  
 QY 1324 AGAAGAAAGAGAGCTATGTGTGCGCCCGCAAGCGAGGCGCATACACGCGGAG 1383  
 Db 1103 TCGCGAGAAAGGCGGCGGTCTCTCTCGCAAGAGGCGCAAGGCTCTGCGCTCGGTG 1162  
 QY 1384 GCTTGGCGCATTCAGGCGCTTACTACGAGTCACTTCCTTGAAGCGCTCAGACAGCAG 1443  
 Db 1163 ACGCGGCAAGAGCATGCGGCTCATGCGCCGACAGCGCGCTGAC---CCAAAGTCAAGCGC 1221  
 QY 1444 TCGAGAGCGCGCATGCTACACGCTGCGGCGCTTACACACACCTTCTCTCATTTAGCG 1503  
 Db 1222 CTGGGAGCGCGCCACGCTGCTCCGAGACTGCGGCGCGCGCTGACACCATCAAGGCGC 1281  
 QY 1504 AGCAATGCTCTACAGCGCGCGCTCGCGGCGATCGCTGAGAGGCTTTCACAGAGCCCC 1563  
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 QY 1564 CTGTATCCCTTAACCGCGCAGACATTTGACGAGCTTCTTCAACCAAGCGCAATGCAAC 1623  
 Db 1342 ATCCGCGCGGGAACCTCAAC-----CCGCGCTTCAAC 1375  
 QY 1624 TGTGAGTACTTACACCCCAAGGCGGAGACACGTGTGACGCGAGTGAAGGCGACGT 1683  
 Db 1376 AGGGCCACAGCTCAGAGCGGCGGAGGCGGCGGCGCTTACAGAGGCGACGCTGACCTGC 1435  
 QY 1684 ACACCGCGGAGGAGGAGTACGACCTTACGAGCTGCGCTGTGCTGTGCGGCGAGCAAAAG 1743  
 Db 1436 CGCGCGAGCGGAGTACGACCTGCGGCTGCGTGCACCGGTGTACGCGCAGGCTGACG- 1494  
 QY 1744 CGTAGTACGACAGCTGCTGTCGACAGCGCACCAAGAGTCCCGGCGAGTCCCT 1803  
 Db 1495 -----CTGCGGAGCCACA 1507  
 QY 1804 TCTTGGCTCCGCCACCGCGGAGAGAGGCGCATTCATCTGTCACAGCAACGT 1863  
 Db 1508 CCATGAGGCGGCTAGGTCTACGCGCAAGGTGAGACACCGCGCTCAAGCTGACCAAG 1567  
 QY 1864 ACAATGTAAGTGAAGTGTGGCTCCGACACCCACTACACCTTCAAGAGGCGACACATG 1923  
 Db 1568 GCAGCCACAAGCT-----CAGATCTGGCGTTGTGCAATTA 1603  
 QY 1924 TCCCGGCGAGGCTCCCTCCGCTCGCGGCTGCAAGGATTCATGACGACAGCGGAAA 1983  
 Db 1604 GTGCCACCCCGCTCTCGGTGAGTGGGTGGAGCCGCGGCGCGCGACAGCA 1663  
 QY 1984 TCGAAAGTCCGTGCGCTCGCCCAAGAGCAGACAGTCAATCTGCGGCGGCTTGA 2043  
 Db 1664 TCGGGAAGGCGGTGAGTTCGCGCGGAAAGCCCGTACGCGGCTGCTTCGCG----- 1715  
 QY 2044 ACAGGCTGAGAGAGAGGAGGCGCGAGCGCGCGCGAGTGAAGCTCCCGCGCGCTGTG 2103  
 Db 1716 -CTACAGACAGGAGCGAGGCGGCTGACCGTTCGCAACTGTGCGCGGTGTACGAG 1774  
 QY 2104 ACAGCTCATTTGCGAGCTGCGCGCGAGACCAACACCTGCTGCTCATGACGAGAGG 2163  
 Db 1775 ACAAGTGTATCTGGCTGTGCGGAGCGCAACCGCAACGATCTGTGTCTCAACACCG 1834

QY	2164	GCAACCCCGAGAGATGCCCCGTGGCTCGACGCCACGCCGCCCGCTCATCCAGGGCCGTGGTACG	2223
Db	1835	GTTCGTGCGGTGATGAGCCGTGGCTGTCCAAAGACCCGGCGGGCTCTGGACATGTGGTAC	1894
QY	2224	GGCGCAACGAGACGGGCAACTCATATGCCAGAGTGTCTTTGGGACTCAACCCCTCGG	2283
Db	1895	CGGGCCAGGGGGGGCGCCGAGGCCACCGCGGGCTGCTCTTACGGTGAAGTCAACCCGAGCG	1954
QY	2284	GCAAGCTGTCCCTCAGCTTCCC-----AAGCGCTTGAGAGCAACCCGGCGATTCC	2334
Db	1955	GCAAGCTCAGCGCAGAGCTTCCCGCGCGCGAGAACCCAGACCGGGTCCCGCGGACCCGA	2014
QY	2335	TCAACTTCGCGACCGAGAGCGCGGGCGCACGCTTAGCGGCGAGACTCTACGTCGGGTACA	2394
Db	2015	CAACTACCCGGGGGCTCGACAAACACAGACGACGACCGGAGGGACTCCACGTCGGGTACC	2074
QY	2395	GGTACTACGAGTTTGGCCGACAGAGAGCTCAATTTCCCTTTGGCCAGCGGCTGTCTCTACA	2454
Db	2075	GCTGTTTTCGACAGAGGAAAGATCAACCGCGTGTTCCTCGTTCGGGACCGGCTGTCTTACA	2134
QY	2455	CCACTTTGGCTTTTCCAAATCTCTCCGCTGTCTACAAAGAAC---GGCAAGCTGAAGCTGT	2511
Db	2135	CCTGCTTACGCCAAGAGGCCCCCGACCGTGTGCTGTAAGTCTCAACGGGTGGTGTGAAGGTCA	2194
QY	2512	CCCTCTCCGTGAGAACACCGGCTCTCGTGGCCGGCGGACAAAGTGGGCCCAAGCTCTACGGTCA	2571
Db	2195	CGGTTCACGCTCCGACAAAGCGGGGAAAGCGCGCGGCGAGGAGGTCTGACAGGCTACTCTCG	2254
QY	2572	AAGCCCTTCAAGCGGCAAGATTAAACGCCGCCCTCAAGAGACTCAAGGGCTTTCGCAAAAG	2631
Db	2255	GTGCCAAGCCGAAGTGAAGCTCCGACAGCGGAAAGAAAGAGCTCTGGGCTACACAGAGG	2314
QY	2632	TCGAACGTAGAGCCCGGCGAGACGAAGGCGGTGAC	2665
Db	2315	TCCTGCTCGCGCGGGCGAGGCGAAGAGGTGAC	2348

RESULT 4  
US-09-988-384B-3  
; Sequence 3, Application US/09988384B  
; Publication No. US20030073824A1

```

1  APPLICANT: SHEKHAN, D.R.
2  APPLICANT: Liu, H.
3  APPLICANT: Xue, Y.
4  APPLICANT: Zhao, L.
5  TITLE OF INVENTION: DNA encoding methymycin and pikromycin
6  FILE REFERENCE: 600,536US1
7  CURRENT APPLICATION NUMBER: US/09/988,384B
8  CURRENT FILING DATE: 2001-11-19
9  PRIOR APPLICATION NUMBER: PCT/US99/14398
10 PRIOR FILING DATE: 1999-06-25
11 PRIOR APPLICATION NUMBER: US 09/105,537
12 PRIOR FILING DATE: 1998-06-26
13 NUMBER OF SEQ ID NOS: 53
14 SEQ ID NO 3
15 LENGTH: 12441
16 TYPE: DNA
17 ORGANISM: Streptomyces venezuelae
18 US-09-988-384B-3

```

Query Match	5.9%;	Score 175.2;	DB 9;	Length 12441;
Best Local Similarity	47.6%;	Pred. No. 5.2e-33;		
Matches 1016;	Conservative	0;	Mismatches 968;	Indels 150;
				Gaps 11

QY	544	CGGCGGTTCCCAATTCACCAACCAACCTCTCGTGAAGAGGACAGTAAAGTATGGGCAAG	603
Db	3977	CCCTGGCCAGACCTTGGAGGACCAATGGCCGACAGCTAAGGCAAGGTCATGGGCGCG	4036
QY	604	AGGCCATGCGTAAAGATGGCCCATGTATCTCTGGGCCGCACTTCACAAATGCAAGAGCTCC	663
Db	4037	ACGGTCGCGCGCTACCAACGAGACATGGCTCTGGGCCGAGTGATGAACACATATCCGCGTGC	4096

Qy	664	CTCTGGGTGGAGCTGGCTTTCAGTGTGATTTGGTGTGAGATATCCGTTCCGGGGGACTTGGGAG	723
Db	4097	CGCACGGCGCGCCGGAACCTACAGAGACCTTTCACAGGAGACCCCTTGCTCTCTCGCGACACC	4156
Qy	724	CTGGGGCTCTCATCCCGGCACTTCCAGACATCGAGATGACAGGGCTACGATTAAGC/CTTTT	783
Db	4157	CGGTGCGCCAGATCAAGGAGGATCCAGGGTGGGGGTCTGATGACACGGCCAAAGCACTTGG	4216
Qy	784	TGTGCAATGATACGAGAGACAGAGCGCATGATGTGTGCAGAGATCTGTCTACGAGAGCGGGTC	843
Db	4217	CGGCGCAACACCGAGGAGAAACAACCCCTTCTCCGTGAACGCAATGTGACAGACAGACACC	4276
Qy	844	TCGCTGAATCTATGACGACTCCGTTTCCAGATTTGCTGTGACGAGACTCCACGCGGGTGGT	903
Db	4277	TCGCGGAGATGTGATTTCCGGGCTTGGAG---GGCTCTCCAAAGGCGGGCGGCTCTCT	4333
Qy	904	TCATAGCGGCGTCAATATGGCATCAATGCGCTGTGTGTGACGAGAACCTTAATATCTTG	963
Db	4334	TCATATGTGGCTACAAAGGCGCTCAACGGGAGCCCTCTCTGGCGGACAGACACTTCTTA	4393
Qy	964	ATGGATGTCTTCCGAAGAGATGGGGGTTGGGATGGCTTAATATGAGGACTGTGTACGGCA	1023
Db	4394	ACAAAGTGTCTCGACGACGCAATGGGGCTTCCAGAGGCTGGGTATATTCGACTGGCTGGCA	4453
Qy	1024	CATACAGTACACGAAAGCCGTTGTGGACGGCTTGACCTTGACCTTGAGATCCCGAGACTTCAC	1083
Db	4454	C---CCGGGAGACGAGCGCATCACCAAGGCGCTGACACAGAGATG-----	4497
Qy	1084	GCTTCCGAGGAGAAACACTCAATTTCAAGTGTCCACAGGGAAGCCCTTATATCCAGTCA	1143
Db	4498	-----GGGTGTGAGCTTCCCGGACAGGTCCGAAAGGAGGAGCCTCGCGCGCGGCCA	4549
Qy	1144	TTGACCAAGAGGGCTAGGGAATTTCTTCACTGTGTCAAGAAAGTGTGTCTCCGGAATGA	1203
Db	4550	AGTTCTTGGGGGA---GGCGGTGAAGCGGCGCTCTCTGAACGGCACGGTCCCCAGGGCG	4606
Qy	1204	CGGAGACGGCCCCGAGACACACTGTCAAAACAACCCCGAAACGGGACACTTCTCTCGGA	1263
Db	4607	CCGTGACGGGTGTGGCGGAGGGGATCTGTGGCCAGATGAGAAATTTGGTGTGTCTCTCG	4666
Qy	1264	AGGTTGGCAAGAGAGGCACTGTGTCTGTGAAGAACGAGAACAACTTCTGCCCTTGAGCA	1323
Db	4667	CCACTCCGGCGCGCGGCGCGAGGCGGACAAAGCGGGGTGCCAGCGGCTGTCCGCAAGG	4726
Qy	1324	AGAAGAAGAAGACGCTGATTTTGGCCCCCAAGCCCAAGAGGCGCAATACCAACCGCGAG	1383
Db	4727	TCGCCAGAGAAGCGCGGGTGTCTCTGTGGCAACAGGGGCCAGGCTCGCGCTCGCGGTG	4786
Qy	1384	GCCTGTCCGCACTTCAGGGGCTACTACGCACTCACTCCCTTTGACGGGCTCAGCAAGAC	1443
Db	4787	AGCGCCGCGCAAGAGATTCGCGGTCTCATTCGGCCGAGCGCGCTGTGCAG-CCCAAGGTATACGGC	4845
Qy	1444	TCGAGAGCGCGCATCTGTACACCGTGGCGCTTACACACACCGTTCTCTCCATTTCTAAGCG	1503
Db	4846	CTGGGACGAGCGCCACAGTGTCTCCGCACTCGGCGGCGCGCACTTGACAC/ATCAAGGCC	4905
Qy	1504	AGCAATGTCTCAAGCGCGCGAGCGGCTCCGGGCAATGCTGTGAAGGTCCTTCAACGAGCCC	1563
Db	4906	CGCGCGGGGTGTGGGTGTGTGACGTGTACGTACAGACGSGGTGAGGAGACTTTTGGCACGAG	4965
Qy	1564	CTGGTATCCCTTAACCGGACGCAATTGACGAGCTCTTTTCAACAAGACGGAACAGCAAGC	1623
Db	4966	ATCCCGGCGGCGAAGCTTCAAGC-----CCGGGCTTCAACC	4999
Qy	1624	TGTGTGACTACTTACCAACCCCAAGGCGGACAGACGTGTATCGCGCATGAGAGGACAGT	1683
Db	5000	AGGGCCACACAGCTCTGAGCGGGGCAAGGCGGGGGGCTGTATGCAAGGGCACGTGACCTGTG	5059
Qy	1684	ACACCGCGCAAGGAGACTGCACTACAGACTTGCGCTCTGTCTGTCTGCGCACAGGCAAGG	1743
Db	5060	CCGCGCAAGCGCGAGTACCACTACGCGGTCTGTGCACACGGTGTGTACGCCACAGGTGTGAG-5118	
Qy	1744	CGTACGTAGACACAGCTCTGTCTGTGCACACGCGCACCAAGCAAGTCTCCCGGCGATGCTCT	1803



Db	5119		-----CTCGGACGACCA	5131
QY	1804	TCCTCGGCTCCCCACACCCCGAGGAGAGAGGGCCGATCATCTCTGTCAGAGGGCAACAGCT	1865	
Db	5132	CCATCGAGGCCGGTGAAGGTCTTAACGGCAAGTGTAGACACCCCGCTCTCTCAAGCTGTACCAAGG	5191	
QY	1864	ACAAGTTCAAAGTTCAGATTGGGCTCCGCACCCACATCAACCCCTCAAGGGCGACACATCG	1923	
Db	5192	GCACGACCAAGCT	-----CACAGTCTCGGGCTTCGGGATGA	5227
QY	1924	TCGCCGGCCACCGGCTCCCTCCGCTCGGCGGTTCGAAGGTCAATGTGACGACACGGGCCAAA	1993	
Db	5228	GTGGCCACCCCGGCTCCCTGGAGGTGGGCTGGGTAGACGCCGGCGCGCCACGGAGCA	5287	
QY	1984	TGGAAAAGTCCGTCGCCCCGCCAAGAGACAGCAAGGTCAATCTTCGCGGGCTCTTA	2043	
Db	5288	TCGCGAAGGCCGTGGAGTGCAGCGCGGGAAGGCCGTACGGCGGCTCTTCGC	-----	5339
QY	2044	ACGCCGACGTGGAGACCGAGGGGCGCCAGCGGCGGAGCATGAAAGCTCCCGCGCTGCTGG	2103	
Db	5340	-CTAGAGAGACGGGACCGAAGGCGCTGACCCCTTCCCACTGTGCGTGCAGGGGTACGAGG	5398	
QY	2104	ACCACCTAATTGCCAGCTGGCCGCGCGCAACCCAAACAACCGTCTGCTGTACGTAGACAGG	2163	
Db	5399	ACAACTGATCTCGGCTGTGCGGAGCGCCAAACCCGAACAGATCGTGGTCTCAACACCG	5458	
QY	2164	GCACCCCGGAGAGATCCCGGGCTGTAGGCCACAGCGCCGCGCTCATCCAGGCTGTGTACG	2223	
Db	5459	GTTCGTGCGTCTATGTGCGCTGCTGTCCAAAGACCCGGCGGCTCTGTGACATGTGTAGCC	5518	
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QY	2455	CCACTTTGGCTTTTCCAACTCTCTCGGTGTCTACAAAGAC	-----GGCAAGCTGAGGGGTG	2511
Db	5759	CTTGTTTCAGACGACAGACGCGCCGACGCTGTGCGTACAGTCCAGGGTGTGTAAAGTCA	5818	
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Db	5879	GTGGCAGCCGAAACGTGAAGGCTTCGCGAGGGGAAAGAAAGTCTGTGGGTACAGAAAG	5938	
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? TITLE OF INVENTION: DNA encoding methymycin and pikromycin
? FILE REFERENCE: 600.438US1
? CURRENT APPLICATION NUMBER: US/09/860,846
? CURRENT FILING DATE: 2001-05-18
? PRIOR APPLICATION NUMBER: 09/105,537
? PRIOR FILING DATE: 1998-06-26
? NUMBER OF SEQ. ID NOS: 43
? SOFTWARE: FastSeq for Windows Version 3.0
? SEQ. ID NO 3
? LENGTH: 13613
? TYPE: DNA
? ORGANISM: Streptomyces venezuelae
? US-09-860-846-3

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Query Match	5.9%;	Score 175.2;	DB 9;	Length 13613;
Best Local Similarity	47.68;	Pred. No. 5.4e-33;		
Matches 1016;	Conservative 0;	Mismatches 968;	Indels 150;	Gaps 11.

OY	544	CCTGCGGTTCACAAATTCACCAACAACCTGCTCAGAAAGGGCACAGTAAATATATGGCCAAAG	603
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OY	604	AGGCATTCGCTAAGACTGGCATGTGTATCTTGCCGCCAGCTATCAACATCAACAGCTGCC	663
Db	4724	ACGGTCGCGCGCTCAACCGAGCATGTGTCGTGGGCCGATGATTAACATAATCCGGGTGC	478
OY	664	CTCTCGGTGAGAGTGGCTTTCGAGTCGATGGTAGAGATCCGTTCTTGCGCGGCTTGGAG	723
Db	4784	CGCACGCGCGCGGAACATACGAGACTTTCACCGAGGAGACCCCCTGGTGTCTCTGCCACCG	484.
OY	724	CTGCGGCTCTATTCGCGCGCATCTGGACACTGGAGTGCAGGCGTACGATCAACACTTTT	783
Db	4844	CGGTCCCCAGATCAAGGGCATCCAGGGTGGGGGTCTGTATGACACGGCCCAACATTTTG	490:
OY	784	TGTGCATGATCAGAGAGACAGGCGCATGATGTACAGACATCTGTACGAGAGCGGGCTC	843
Db	4904	CGGCCMACCAACGAGAGAACAACGGCTTCTCGGAACGCCATATGTGCAGAGAGACGCC	496:
OY	844	TCCGTGAATCTAACCCACTCCCGTCTCCAGATTGTGTGCGAGCTCCACGCGGGTGGT	903
Db	4964	TCCCGAGATCAGTTCCCGCGTTTCAG---GGCTCTCAAAGCGCGCGCGCTCTCT	5020:
OY	904	TCATGACGCGCTACATGGATGCATATGGCGTGTGTCACGAGACCCATAATATCTTG	963
Db	5021	TCATGTGTGCTACACAGCGCTCAAGCGGAGCCGTCTCTGCGCACAGCAGCTCTCA	5080:
OY	964	ATNGGATGCTTGGAAAGGAATGGSGTTGGAGTGGCTTAATCATGACGACTGGTACGGCA	1023:
Db	5081	ACMACGTCTGCTGGACAGCAGTGGGGCTTCAGAGGCTGGGGTGAATGTCCAGTGGTCCGA	5140:
OY	1024	CATTACGATACACAGAAGCCGTTGTGGCAGGCTTCGACCTCGAGATGCCCGGACTCCAC	1083:
Db	5141	C---CCCGGACCGAGCGCATCACAGGGGCTTCGACAGGAGATG-----	5184:
OY	1084	GCTTCCGAGGAACAACCTCAAGTTCACCTCCAAACGGAAGCCCTTATTCACGTCA	1143:
Db	5185	-----GGCGTGCAGCTCCCGGGAGCGTCCCGGAAGGGCAGCCCTTCGCGCGGCA	526:
OY	1144	TTGACACAGAGGGCTAAGGAAGTCTTCACTGCTCAAGAAATGTGTCTGCTCCGAGTGA	1203:
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OY	1204	CGAGAAACGGCCCCGAGACACTGTCAACACACCCGAAACGGCAGCTCTCTCCGGA	1263:
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OY	1264	AGTTGGCAACGAGGGCATGTGCTCTGAMAGAACGAGAACAGCTTCTGCTTGAACA	1323:
Db	5354	CCACTCCGAGCGCGCGGCCGAGCCGACACAGGCGGGGTGCCAAGCGGTGCCGCAAG	5413:
OY	1324	AGAAAGAAAGACGCTGATTTGTGGCCCCAACACGCCAAGCGCCACATACAGGCGGAG	1383:
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QY 1384 GCTGTGCGGCACTCAGGGCCCTACTACGACATCCCTTTGACGGCCCTCAGCAAGCAGC 1443  
 DB 5474 ACGCCGGCAAGACATCGCGGTATCGGGCCGACGGCCGCTGAC -CCCAAGGTCAACGGC 5532  
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 DB 5806 -CTGGGCAAGCCACA 5818  
 QY 1804 TCTTGGCTCCGCGCACCGCGGAGGAGGCGGCGCATCAATCTGTCAGGCGCAACAGT 1863  
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 QY 1864 ACAAGTTCAAGTCAAGTTCGGCTCCGACCCACCTACACCTCAACCGGAGACACATCG 1923  
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 DB 5915 GTCCACACCGCGCTCTCCGAGAGCTGGGCTGTGATGCCGCGGCGCGGCGGCGGACGA 5974  
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 : Sequence 3, Application US/09861289  
 : Patent No. US20020110897A1  
 : GENERAL INFORMATION:  
 : APPLICANT: Sherman, D.H.  
 : APPLICANT: Liu, H.  
 : APPLICANT: Xue, Y.  
 : APPLICANT: Zhao, L.  
 : TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
 : FILE REFERENCE: 600,438US1  
 : CURRENT APPLICATION NUMBER: US/09/861,289  
 : CURRENT FILING DATE: 2001-05-18  
 : PRIOR APPLICATION NUMBER: 09/105,537  
 : PRIOR FILING DATE: 1998-06-26  
 : NUMBER OF SEQ ID NOS: 43  
 : SOFTWARE: FastSeq for Windows Version 3.0  
 : SEQ ID NO 3  
 : LENGTH: 13613  
 : TYPE: DNA  
 : ORGANISM: Streptomyces venezuelae  
 : US-09-861-289-3  
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 Best Local Similarity 47.6%; Pred. No. 5.4e-33;  
 Matches 1016; Conservative 0; Mismatches 968; Indels 150; Gaps 11;  
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 QY 2455 CCAGTTTGGCTTTTCCATCTCTCGGCTGCTCAAGAGC---GGCAAGCTGACGCTGT 2511  
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 Db 6506 CGGTACAGGCTCCGACAGGAGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGGCGG 6565  
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## RESULT 7

US-09-808-880-1/c  
 ; Sequence 1, Application us/09808880  
 ; Publication No. US20030027287A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Beliaeh, Mary C.  
 ; APPLICANT: Shan, Sanjay Krishnakant  
 ; APPLICANT: McDaniel, Robert  
 ; APPLICANT: Tang, Li  
 ; TITLE OF INVENTION: RECOMBINANT OLEANDOLIDE POLYKETIDE SYNTHASE  
 ; FILE REFERENCE: 30062-20029.00  
 ; CURRENT APPLICATION NUMBER: US/09/808, 880  
 ; PRIOR FILING DATE: 2001-03-14  
 ; PRIOR APPLICATION NUMBER: US/09/428, 517  
 ; PRIOR FILING DATE: 1999-10-28  
 ; PRIOR APPLICATION NUMBER: 60/120, 254  
 ; PRIOR FILING DATE: 1999-02-16  
 ; PRIOR APPLICATION NUMBER: 60/106, 100  
 ; NUMBER OF SEQ ID NOS: 12  
 ; SOFTWARE: PatentIn Ver. 2.1  
 ; SEQ ID NO 1  
 ; LENGTH: 50937  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Description of Artificial Sequence: Recombinant DNA  
 US-09-808-880-1

Query Match

4.7%; Score 138.6; DB 9; Length 50937;



Page 9

PRIOR APPLICATION DATA:

RESULT 10  
US-09-790-399-7  
Sequence 7, Application US/09790399  
Patent No. US20020038000A1  
GENERAL INFORMATION:  
APPLICANT: Gold, Larry  
APPLICANT: Thuerk, Craig  
APPLICANT: Pribnow, David

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RESULT 11
US-09-748-033-2
; Sequence 2, Application US/09748033
; Patent No. US20020069431A1
; GENERAL INFORMATION:
; APPLICANT: Broadway, Roxanne M.
; APPLICANT: Gongora, Carmenza E.
; TITLE OF INVENTION: EFFECT OF ENDOCHITINASE AND CHITOBIOSIDASE AND THEIR
; TITLE OF INVENTION: ENCODING GENES ON PLANT GROWTH AND DEVELOPMENT
; FILE REFERENCE: 19603/3091
; CURRENT APPLICATION NUMBER: US/09/748,033
; CURRENT FILING DATE: 2000-12-22
; PRIOR APPLICATION NUMBER: 60/117,003
; PRIOR FILING DATE: 1999-12-23
; NUMBER OF SEQ ID NOS: 8

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; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 2
; LENGTH: 1294
; TYPE: DNA
; ORGANISM: Streptomyces albidoflavus
US-09-748-033-2

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Query Match	2.68;	Score 78.2;	DB 10;	Length 1294;
Best Local Similarity	43.88;	Pred. No. 2e-09;		
Matches 396; Conservative	0;	Mismatches 503;	Indels 6;	Gaps 1

1562	CCCTGGTACCCCTTAACGGGAGGACATTACAGCTCTTTCTTCAACAAGAGGGACATGCA	1821
209	CCCCCTTCCGACCCCGGCGGGGCCCTTCACGCGCCGGGCTTCACCCGAGGGCGGGCT	268
1622	CTTGTTGGACTTACTACCCACCCGAGGCGGAGACGATGTGTACGCCGACATGAGAGGAC	1681
269	GACCGCGCCCTTCACCGCGGCGCTCTCGGCGGCTCCGGGCTCGGCTTACCGGCCCCGC	328
1682	GTACACCGCGGAGGAGACTGCAACACAGAGCTGGGCTCTGTGCTGGGCGCACGGCAAA	1741
329	GACCGCGGCGGAGGGGCGCCCCCGCGCCAGCGCGCCCGGGCGCGTACCGGGCCACGC	388
1742	GCGGTACGTAGACGACGAGCTGTGTGTGCAACGGCCACCAGACAGTCCCCGGGATGC	1801
389	GGTAGCCGGTACGTGGGAGAACTTCAACAACGGCGGAGCGACTGTGACAGCCTTGCCGAGT	448
1802	CTTCTTGGGCTCCGACCCCGGAGGAGAGCGGGCGCGATCAATCTGTCAAGGCAACAC	1861
449	GCGGAGCCCTACGACATCATCG-----CGGTCTCTTGGCGGAGCGCACGGCCAAAGC	502
1862	GTACAAAGTTCAAGATCGATTCTGGGCTCGGACCCACCTACACCTCAAGGGGACACCT	1921
503	GCGCGAGATCACTTACCCCTCGACTCGATGGGCTCGGGCTTACACCGACGACGATTT	562
1922	CGTCCCGGCGACGCTCTCTCCGCTCGCGGTGGGGGTGCAAGTATTGACGACGAGCCGA	1981
563	CGCGCGCGACCTCGCGCGGCAAGCGGCGGAGGAACTCGGTATCATCTCGGTCGGCG	622
1982	AATCGAAAGTCTCGTGGCCTTGGCCAGAGAGACAGACAGGCTCATCTTGGCGGGCT	2041
623	CGAGAAAGGCGGGTCCGCTTAACGACAGGCGCTCCGCGAGGCTTCCGCGACAGCAC	682
2042	TAAAGCCGACTGGAGACCGAGGGCGCGGCGGAGCGATGAAGTCCCGGCGGCTGT	2101
683	CTACGCGCTGATGGAGATGAGGCTTGAAGGGCTCGACATTCGACCTGGAGAAAGGCT	742
2102	GGACACAGCTATTGGCGAGTGGCGCGCGCGAACCACCAACACCGTCTGTATGACAG	2161
743	CAATCCACTACATATGACCGAGAGGCGCTCACAACTCCACAGAAAGCGGGGAGGCT	802
2162	GGGACACCCCGAGAGATGCTCTGGCTGCAAGCCACAGGCGCGCGATTCAGGCGTGT	2221
803	GGTCTCAACCATGGCGCGGACGACATTCGACATGCAAGTGGCCCGGAGAACGATCTTCA	862
2222	CGGGGCAACGAGAGGGGCACTCTATTCGACGCTCTTTGGGCACTCAACCCCTC	2281
863	GACGGCGCTGTCAAGAAACCTTCTGACCGCGCTCAACATGACAGTACTCAACAGGG	922
2282	GGGCAAGCTGTCTCTAGCTTCCCGCAAGCGCTCGAGGAGCAACCCGGGTTTCTCACTT	2341
923	CTCATCTGTGGTGCACAGGCCAGGTCTTACGGGCGAGGCGACCTCGACTTCTACGCG	982
2342	CGGACCGAGGCGGGGGGCAAGCTTACGCGGAGAGAGTCTACGTGGGTACAGTACTA	2401
983	GCTGCGCTGCATTCAGTGTGAGAAAGGTTTCAGCGCTCCGAGTGGGATGGTGTCC	1042
2402	CGAGTTTGGCAGACAAGAGCTCAATTTCCCTTTGGCGCAAGGCGCTCTCTACACACTT	2461
1043	CGGCTCCCCGAAAGCGCGCGCGGCGGTACGTGAGCCCTCTGTGTACAGCGGCT	1102
2462	TGGCT 2466	

Db 1103 GGACT 1107

RESULT 12  
US-09-748-033-6  
; Sequence 6, Application US/09748033  
; Patent No. US20020069431A1

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? GENERAL INFORMATION:
? APPLICANT: Broadway, Roxanne M.
? APPLICANT: Gongora, Carmenza E.
? TITLE OF INVENTION: EFFECT OF ENDOCHITINASE AND CHITROBIOSIDASE AND THEIR
? TITLE OF INVENTION: ENCODING GENES ON PLANT GROWTH AND DEVELOPMENT
? FILE REFERENCE: 19603/3091
? CURRENT APPLICATION NUMBER: US/09/748, 003
? CURRENT FILING DATE: 2000-12-22
? PRIOR APPLICATION NUMBER: 60/172, 003
? PRIOR FILING DATE: 1999-12-23
? NUMBER OF SEQ ID NOS: 8
? SOFTWARE: Patent In Ver. 2.1
? SEQ ID NO: 6
? LENGTH: 1107
? TYPE: DNA
? ORGANISM: Streptomyces albidoflavus
US-09-748-003-6

Query Match          2.6%;      Score 76.2;  DB 10;      Length 1107;
Best Local Similarity 45.7%;      Pred. No. 5, 9e-09;
Matches 390; Conservative 0; Mismatches 448;      Index 15;      Gaps 3

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OY	1467	GTGCGCCCTTACACACACCGTTCTCTCTCCATTTCATAGGGGACACAGTGGCTCCAGGCCACAGGC	1526
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OY	1527	GCCTCGGGGCATATGCGCTTGAGAGGTCTTTCACAGAGCCCCCTGTACCCCTTACCGGGCAGGC	1586
Db	178	GAGTCTGGTCGACGGCGCTGCGCCGACACTGTGGACACCCGCTGCGGGCACTTTCAAACGAG	237
OY	1587	ATTGACGAGCTCTTCTTACCAAGACGAGACATCCACTGGTGGACTACTATCACACCCCAAG	1646
Db	238	CTTCGCAAGCTCAAGGCCAAGTACCCGCACATCAAGGTCCTCTGTGCTCTTCCGCGGGCTGG	297
OY	1647	GCGGCAGACACGTGTATGCCGCTTACGAGCCGACATGAGAGGACACGTACACGCCCGACGAGACTCGAC	1706
Db	298	ACCTGTCCTCGCGGCTTCCACCGAGCGCGGTGAAGAACCCGGCCGCTTCCGCAAGTCCCG	357
OY	1707	TACGAGCTCGGCTCTGTCTGTGGCGCACGGCAAGGCGTACGTATGACGACACAGCTGTCTC	1766
Db	358	CACGACCTCGG---TCGAGGACCCCGCGCTGGCGCGACGCTTTCGACGGCATGTACCTTGAC	414
OY	1767	GTCGACACAGCGCACCAACAGTAGTCCCGCGCATGCTCTTCTCGGCTCCGACCCCGGAG	1826
Db	415	TGGGAGTATCCCGAAGCGCTCGCGGCTTACGTCTGGACAGAGTCCGGTCCGGCGCGCTGTAAG	474
OY	1827	GAGACGGGCGGCATCATCTGTCTCAGGGGCAACGTTACAACTTCAGATGATGATGATGTGGG	1886
Db	475	AACATGTGTCAAGCATATGGCGCCCGAGTTTCGGACCGACCTGTGTACCGCGCGCATACCC	534
OY	1887	TCCGACCCACCGCTACACCGCTCAAGGGGCAACACATGTCCCGGCGCACGGTCTCCCTCCG	1946
Db	535	GCCGACGCCAGCTCGGGCGGCAAGTCTCAGCGCGCGCGACTACGCGGGGCGCCCGCAATGAC	594
OY	1947	GTCGCGCGCTGCAAGTCTAT-----TAGCAGACGAGGGCGGAATGTGAATACTCGTGGCC	2000
Db	595	TTCGACTGTGTACACGTATGACGTACGACTTCTTCGGCGCTGGGACAAAGACGGGCGCG	654
OY	2001	CTCGCCAAAGAGACGACGACGAGTCAATCATCTCGCGGGCTTTAACCGCGCATGGSAGAAC	2060
Db	655	ACGGCGCCCACTCGGCGCTTGAACCTCTACACGGCGATCCCAAGGCGGCACTTCCACTCG	714
OY	2061	GAGGGGCGGACCGCGCGAGCATGAAGCTCCCGCGGTGCTGGACACAGCTATTTGCGGAC	2120
Db	715	GGCGCGCGCATCCCAAGCTCAAGGGGAGAGGGGTCCCGGCGAGCAAGACTCTGCTCGGC	774

	Query Match	2.68;	Score 76.2;	DB 10;	Length 2712;
	Best Local Similarity	45.78;	Pred. No. 9,1e-09;		
	Matches 390;	Conservative	0;	Mismatches 448;	Indels 15;
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Db	1685 GGGCGCAAGTGACACCAATCGGTGACACTTGGCCGCTACGACAGGCGTACACCGCGCC	1744			
QY	1527 GCTCCGGGCGATGGCGCTGGAGGGTCTTCAACGAGCCCTTGTAACCCCTACCGCCAGCAC	1586			
Db	1745 GACTCGGTGACAGGGCGTGCGCCGACACCTGGGACACCCGCTGGGGCGCACTTCAACACAG	1804			
QY	1587 ATTGACAGACTCTTCTTCAACCAAGAGGAGACATGACACTGGTGGACTACTACACCCCAAG	1646			
Db	1805 CTCGGACACTCAAGGCCCAAGTACCAGCAATCAAGTCTCTGTGCTCTTGGCGGGCTGG	1864			
QY	1647 GCGGCAGACAGTGGTACGGCAGATGAGGGCAGACGTACACCGCCGACGAGGACTGCAAC	1706			
Db	1865 ACCGTGGTCGGGGGCTTACCGACGCCGGAAGAACCGGGCCGCTTGGCCAGTCTTCG	1924			
QY	1707 TACGAGCTCGGCTGTGCTGGGGCACGGCAAGGCGTACGTAGACACCACTGCTG	1766			
Db	1925 CACGACCTGG---TGAAGACCCCGCTGGGGCCGACGCTTTCGACGGGATGACTCTGCAC	1981			
QY	1767 GTCGACCAACGCCACCAACAGGATGCCCGGCAATGCTCTTCTGGGCTCGCCACCCGGGAG	1826			
Db	1982 TGGGAGTACCCGAACGCCCTGGGGCTTAGCTGCGCACTCTCGGTCGGCGCGCTGAAG	2041			
QY	1827 GAGACGGGCGCCATCACTCTGTCAAGGGCAACAGTACAAATTCAAGATGAGTTGGC	1886			
Db	2042 AACATGGTCAAGGCGATGGCGCCAGTTCGGCAGCAACCTGGTACCGGGCGCATACC	2101			
QY	1887 TCGCCACCACTACCTCAAGGGGACAACATGCTCCCGGCGACGGCTCCCTCCG	1946			

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RESULT 14
US-09-815-242-7960
? Sequence 7960 Application US/09815242
? Patent No. US20020061569A1
GENERAL INFORMATION:
? APPLICANT: Haselbeck, Robert
? APPLICANT: Ohlsen, Karl L.
? APPLICANT: Zyskind, Judith W.
? APPLICANT: Wall, Daniel
? APPLICANT: Trawick, John D.
? APPLICANT: Carr, Grant J.
? APPLICANT: Yamamoto, Robert T.
? APPLICANT: Xu, H. Howard
? TITLE OF INVENTION: Identification of Essential Genes in
? FILE OF INVENTION: Prokaryotes
? FILE REFERENCE: ELITRA.011A
? CURRENT APPLICATION NUMBER: US/09/815,242
? CURRENT FILING DATE: 2001-03-21
? PRIOR APPLICATION NUMBER: 60/191,078
? PRIOR FILING DATE: 2000-03-21
? PRIOR APPLICATION NUMBER: 60/206,848
? PRIOR FILING DATE: 2000-05-23
? PRIOR APPLICATION NUMBER: 60/207,727
? PRIOR FILING DATE: 2000-05-26
? PRIOR APPLICATION NUMBER: 60/242,578
? PRIOR FILING DATE: 2000-10-23
? PRIOR APPLICATION NUMBER: 60/253,625
? PRIOR FILING DATE: 2000-11-27
? PRIOR APPLICATION NUMBER: 60/257,931
? PRIOR FILING DATE: 2000-12-22
? PRIOR APPLICATION NUMBER: 60/266,308
? PRIOR FILING DATE: 2001-02-16
? NUMBER OF SEQ ID NOS: 14110
? SOFTWARE: FASTSEQ for Windows Version 4.0
? SEQ ID NO 7960
? LENGTH: 1914
? TYPE: DNA
? ORGANISM: Pseudomonas aeruginosa
? FEATURE:
? NAME/KEY: CDS
? LOCATION: (1)...(1914)
? US-09-815-242-7960

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QY 2253 GACGTGCTCTTGGGACTACACCCCTCGGCAAGCTGTCCCTCAGCTTCCCAGAGCG 2312  
Db 1093 GAGATCGTATGACACAGCTTCACTGGGGGGCGAGTTCTTCTACTGCAACAGACCCAG 1152  
QY 2313 CTGCAAGCAACCCCGGCTTCTCACTTCCGACCGAGGCGGGCGCAGCTGTACGGC 2372  
Db 1153 CTGTTCAACAGCACCCTGGACACACCATCGGCCCAACACCAACAGGACCATCACC 1212  
QY 2373 GAGGACGTCTACGTGCGGTACAGTACGAGTTTGGCAAGGAGCTCAATTTCCC 2432  
Db 1213 CTGCCCTGCGCATCAGACATCATCAACCGCTGGGGCGGCAAGGCGCATGTACGCCCC 1272  
QY 2433 TTTGGCCACGGCTGTCTCACCCTTTTCCAACTCTCCGTGTCTCAAG 2492  
Db 1273 CCCATCCGCGGCGAGATCCGTGAGCAGACATCACCGGCTGCTGACCCCGGAC 1332  
QY 2493 GACGCAAGCTGAGCGTGTCCCTCTCCGTGAAGACACGCGCTCGCCCGGCGACAG 2552  
Db 1333 GCGGCAAGGAGATCAGCAACACCGAGATCTCCGCCGCGCGGCGACATGCGC 1392  
QY 2553 GTGCCCCAGCTCTACGTCAGCCCTCCAGCGCCAGATTAAACCGCCCGTCAAGAG 2612  
Db 1393 GACAACCTGGCGCAGCTGTACAAGTACAGTGTGAAGTCAAGCCCTGGGCGTG 1452  
QY 2613 CTCAGGGGCTTCGCAAGGTCGAATGCAAGCCCGGAGAGCAAGGCGGTGAACAATCG 2670  
Db 1453 GCCCCACCAAGGCGAGCGCGGTGTGTCAGCGGAGAGCGCGGCTGACCTGG 1510

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